

**Presentation to
U.S. House of Representatives
Committee on Agriculture
Subcommittee on Conservation, Credit, Rural Development and Research
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**Presentation representing the Georgia Agricultural Experiment Stations and the
Cooperative Extension Service:**

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Mr. Chairman and members of the Subcommittee, thank you for the opportunity to comment and present testimony regarding the effectiveness of Agricultural Research and Extension programs and to share with you some of my thoughts regarding the future.

The Georgia Agricultural Experiment Stations has strong research commitments in both basic as well as applied research. The Cooperative Extension Service has major efforts in three program areas including Agricultural and Natural Resources, Family and Consumer Sciences and 4-H and Youth Leadership. I am pleased to share with you that the Agricultural Experiment Stations and Cooperative Extension Service have played, and continue to play, a vital role in the success of Georgia agriculture. Clearly, our programs are aligned with the clientele we serve including farmers, as well as all others who produce or add value to agricultural commodities.

I'd like to share with you just a few of the programs which illustrate the effectiveness and the role that they play in Georgia. I will mention only the high points, but you will have a copy that provides greater detail about each of these programs.

1. Development and Release of Plant Varieties for use in the Southeastern United States (and in some instances, nationally). During the last several years, the College has released peanut varieties, which presently account for well over 90% of the acreage in the Southeastern United States. Valuable varieties of soybeans, fescue, clover, alfalfa, wheat, blueberries, sod, and ornamentals have also been released. In addition, turfgrass developed on the Tifton campus in cooperation with ARS are used on numerous golf courses and many sports arenas throughout the Southeastern U.S. and internationally.

2. Center for Urban Agriculture. The Center, under the direction of Dr. Gil Landry, is located on the Griffin campus within a fifty mile radius of over 50% of Georgia's 8 million population. The urban agricultural industries represent the fastest growing segment of U.S. and Georgia agriculture, major sources of new employment and a bridge between rural and urban interests. Partnerships have been formed with commercial organizations and regional urban governing organizations that reach major urban audiences. The Center is establishing new ways to coordinate programs state-wide for county agents that should reduce duplication and allow for specialization among

county agents. The Center is providing support for the newly formed Hispanic Working Group, under the leadership of Dr. Jorge Atilas. We expect this effort to result in the establishment of a regional training center for first generation immigrants to include programs such as safety training for Hispanic workers in Spanish. Because many of our farm workers, both in rural and urban settings, are increasingly Hispanic, we need to have a far greater commitment to training Hispanic and other first generation immigrant workers in areas that will enable them to be more effective in supporting Georgia agriculture and Georgia agribusiness endeavors.

3. **The Center for Food Safety.** The Center, directed by Dr. Mike Doyle and located on the Griffin campus, has an internationally recognized research program in the detection and prevention of foodborne pathogens. The program develops and utilizes new microbiological methods for the practical alleviation of foodborne illnesses. Many of the major food producing companies in the United States collaborate with the Center on a routine basis.

4. **Center for Agribusiness and Economic Development.** The Center, under the direction of Dr. John McKissick, has provided leadership to the Value-Added Agriculture efforts in Georgia through feasibility analysis, agent training and industry conferences. Dr. McKissick's group was instrumental in establishing the Southwest Georgia Cooperative Development Center, an incubator for Cooperatives. This was made possible by USDA grant funds. The Center will help people in Georgia form cooperatives and thus lower costs, increase bargaining power, expand markets and improve products and services. This should lead to more jobs and income to a poor rural part of Georgia.

5. **Water Quality and Water Quantity.** The C. M. Stripling Irrigation Research Park is in its second year of operation. Underground and surface drip irrigation systems have been added to the six center pivot and two lateral systems. Irrigation scheduling, sensor and monitoring equipment, and alternative application technologies are being developed and evaluated to determine optimal recommendations for both crop profitability and water conservation. Demonstrations and education workshops are allowing rapid transfer of new knowledge to water users. This work is fully integrated with, and complimentary to, research and commercialization efforts underway at NESPAL and the Technology Development Center on the Tifton Campus.

6. **Agricultural Water Use.** Base line information on agricultural water use is essential for state wide water planning and the ongoing negotiations (court determination) between Georgia, Florida and Alabama. The Georgia Environmental Protection Division contracted with UGA Research and Extension faculty to meter a sample of agricultural water permits. Over 800 systems have been metered from 1999 to 2003. This data will provide a better understanding of quantities of water used by farmers throughout the season in response to crop and rainfall conditions.

7. **Ventilation Techniques.** Ventilation techniques developed by University of Georgia scientists have essentially eliminated mortality and other negative heat related production effects occurring in poultry production. The techniques were directly responsible for the rapid expansion of the poultry industry into South Georgia, an area

previously unsuitable for poultry production due to excessive heat. It is estimated these new systems improved the bottom line of Georgia poultry farmers by \$5 million per year, collectively.

8. Natural Resource Management. Every academic department and county office is involved in addressing environmental issues that affect production agriculture and management of natural resources. The Poultry Science Department developed the innovative Georgia Voluntary Nutrient Management Planning Program conducted in cooperation with the Georgia Poultry Federation and the county Extension agents. Success in the area may be the difference between staying in business and burdensome restrictions that limit profitability. Specialists and county agents conduct water conservation workshops for row crop agriculture, greenhouse and nursery operations, landscape companies and homeowners. A primary contributor to poor water quality in Georgia is soil erosion on residential and commercial construction sites. Georgia specialists are working to establish a regional training and education center, on the Griffin campus, for Erosion and Sedimentation Control. Extension efforts in this program area will help ensure continued existence and profitability of producers and demonstration that Extension expertise can help solve critical urban environmental issues.

9. Fruit and Vegetable Production. Production of small fruits -- such as blueberry, strawberry and blackberry -- and vegetable crops has increased substantially in the last ten years. This continues to be an area of great promise for growth, diversification and value-added for Georgia farmers. Georgia county agents and state specialists were instrumental in organizing the Georgia Fruit and Vegetable Growers Association, the current annual Conference and Trade Show and publication of their bi-monthly magazine. There is close teamwork with county agents and state specialists, researchers, industry, academic disciplines and governmental agencies.

The four-state Southern Region Small Fruit Consortium is a good example of multi-state, joint Research/Extension activities. No one state had sufficient resources for high impact, but together the Consortium has made a difference. In Georgia alone, the estimated impact on the blueberry industry is \$8M over two years.

10. 4-H Youth Development. Georgia 4-H is the largest youth program in our nation. There are 191,695 youth enrolled in Georgia 4-H. The students are primarily age 9-19 and about equal boys and girls. About 52% of 4-H membership lives in towns and cities while 48% live in rural areas, and 3.5 % live on farms. Minorities account for about 38% of membership. The primary delivery of information is in cooperation with school systems in Georgia. Two large components are the 4-H Environmental Education Center and 4-H camp. The program enjoys a large diverse following of avid supporters throughout the state.

11. Forest Resources. Forestry is a major industry in Georgia and an important component of natural resource management. The Warnell School of Forest Resources, under Dean Richard Porterfield, use both McIntire-Stennis and Renewable Resource Extension Act (RREA) funds. The RREA funds have been utilized to support eight forestry Extension faculty member's salary and travel, the annual award winning Forestry

Advanced Specialty Agent Training sessions, youth education activities at the Mary Kahrs Warnell Forest Education Center in Savannah, and to facilitate construction of the outreach center at the state's forestry arboretum. Federal dollars are used to leverage state, county and private fund sources.

12. e-Extension. e-Extension is a national web-based information and education network that provides 24/7/365 access to objective science-based information of land-grant universities. It is coordinated with a community-based educational system of the Cooperative Extension Service and may be obtained via any Internet-accessible device, including computers, cell phones and PDAs. It is designed for new and traditional communities of interest--such as food safety, homeland security, lawn and garden, agriculture and natural resources, environment, energy, youth development and health/obesity. Focused on answers to users' questions, problems and life events, e-Extension provides information in a variety of formats (e.g., frequently asked questions, brief fact sheets, chat and discussion groups, decision support tools, conferencing and streaming video, distance diagnostics, and educational modules).

Nationally, Extension directors and administrators support the concept of e-Extension, recognize it as necessary to meet the needs of current and future clientele, and have agreed to provide cash and in-kind resources to begin development and implementation. In addition, new funding of \$6 million annually is needed.

FUNDING OF RESEARCH AND EXTENSION PROGRAMS

Maintaining funding for support of Agricultural Research and Extension programs is a constant challenge. We employ multiple sources to maintain the viability of our programs. The bulk of our support for both Research and Extension is derived from state appropriations. Approximately 55% of the Research budget and 50% of the Extension budget are state appropriated dollars. Of course, a major funding source for Extension is through county governments and boards of education at the local level. In Research, 32% of the funding is derived from grants and contracts. Both Research and Extension receive approximately 7% of their budget from sales and services. As pointed out earlier, the federal support for Research through the Hatch Act and Extension through Smith-Lever is a very important part of base support for these programs. As you saw in the earlier presentation, these funds are not keeping pace with salary adjustments or inflation. Consequently, I'm deeply concerned that the federal support for Research and Extension has rapidly become a minor part of support for these programs.

FUTURE NEEDS IN RESEARCH AND EXTENSION

One can not argue about the merits and importance of Research and Extension and the success of Georgia agriculture. Indeed, our leadership role in agriculture is to a great extent based on our successful applied Research and Extension programs. While basic research is often times successfully supported through competitive grant processes, much of our applied Research and Extension effort does not lend itself nor are there opportunities for extramural funding. Consequently, we are far more dependent upon state, federal and commodity support for these activities. Some of the areas that we, here in Georgia, clearly believe are relevant and important for the future are in the area of water quality and water quantity and water conservation. While this is already a major thrust of our Research and Extension efforts, we are not committing sufficient resources

to address the needs as we see them. Certainly, the importance of water conservation and the urban landscape, as well as erosion and sedimentation control, are important areas that are not adequately investigated at the present time. We also see the need for greater support of the fruit and vegetable industry which continues to grow dramatically particularly in the Southern part of our state. We believe we should be committing far more resources to improving processing and marketing of Georgia fruit and vegetables. This ties in closely with the need for more value added research and development. These are clearly the purviews of the Experiment Station and the Extension Service, and while this is one of our priorities and we are committing some resources to this area, our efforts are far short of what is ideal in this particular area.

One of the areas we simply are not addressing adequately is the newly discovered parasitism genes that will provide potential targets for intervention in the parasitic process used by nematodes. Plant-parasitic nematodes are responsible for over \$100 billion in annual crop damage worldwide. Georgia certainly accounts for a significant part of that loss. Research in this area will certainly provide the foundation for development of novel strategies for controlling these economically important plant pathogens without the use of agricultural chemicals.

The percentage of state and local funding has continued to increase over federal funding, and the programming accountability to states and local governments has also continued to increase. An accountability system to document the impact of public funds is important. The cost of this accountability doubles if state and federal requirements are not compatible. We encourage CSREES to work with states to find cost effective solutions to accountability reporting that will meet the needs of federal, state and local requirements. To complicate this issue, we have also received conflicting instructions concerning the accountability requirements of multi-state and integrated activities as part of the Agricultural, Research, Extension and Education Reform Act (AREERA).

We rely heavily on the stake-holder input process to guide program direction as required in the AREERA. This planning process is also used to guide the use of state and local dollars. We continue to encourage this grassroots process as the ideal tool to set direction for the state's use of federal funds.

WHAT WE NEED

Probably the most significant point I would like to make this morning is that we clearly recognize several facts.

- 1) Agricultural Research and Extension are critically important for the future of our state and nation.
- 2) These programs are substantially under funded.
- 3) If we are going to be successful and meet the expectations of the people of our state, as well as the consumers in our society, we must do a better job of conducting research and extension programs. Obviously, the key to that success is more, as well as consistent, funding for Research and Extension efforts.

The National Association of State Universities and Land Grant Colleges (NASULGC) Board on Agriculture Assembly/Budget Advocacy Committee has long championed the need for increasing base support for these programs. I urge you to give

careful consideration to the information provided in the first presentation this morning. Clearly, support for the NASULGC budget position is a step in the right direction. We realize full well that support for Research and Extension is a challenge during these tough economic times, but it is truly, as the Dean pointed out, an investment in our future.